

Antibiofouling for Ocean Instruments and Floats Using Microchlorine Generation, Phase I

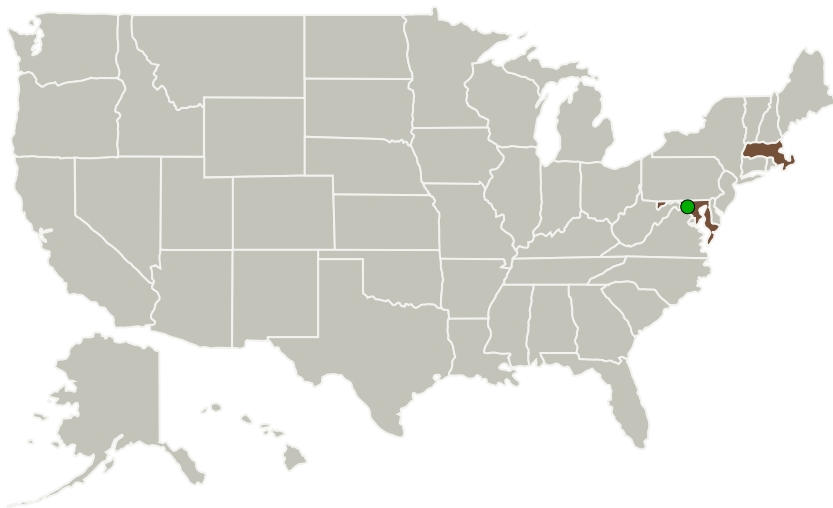
Completed Technology Project (2011 - 2011)




Project Introduction

Long term ocean measurements are severely impacted by algae growth. In this proposed work algae will be inhibited by localized, intermittent microgeneration of chlorine from seawater at sub-PPM levels. This technology will minimize operational labor requirements by eliminating ship time now required for cleaning of these sensors, as well as preventing the release of caustic chlorine to the environment. The calibration of deployed, submerged conductivity/temperature sensors will be extended from the present period of 1 month to 6 months or greater. After phase II an antibiofouling generic design will be available for general ocean instrument use.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
SeaLite Engineering	Lead Organization	Industry	Cataumet, Massachusetts
 Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland



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Primary U.S. Work Locations

Maryland

Massachusetts

Project Transitions

February 2011: Project Start

August 2011: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/138007>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

SeaLite Engineering

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

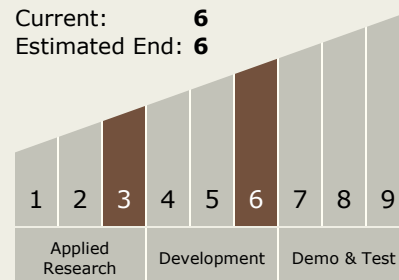
Carlos Torrez

Principal Investigator:

George A Seaver

Technology Maturity (TRL)

Start: **3**
Current: **6**
Estimated End: **6**



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Technology Areas

Primary:

- TX04 Robotic Systems
 - └ TX04.2 Mobility
 - └ TX04.2.4 Surface Mobility

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System